

Appln. No. 10/694,468
Amendment dated: April 28, 2006
Response to Office Action dated: April 13, 2006

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for fabricating a textured dielectric substrate for an RF circuit comprising the steps of:

selecting at least a first and second dielectric board material, each having at least one electrical property distinct from the other;

cutting each of said first and second dielectric board materials into a selected size and shape to form a plurality of dielectric pieces;

selectively arranging said dielectric pieces on a base plate in a pattern to produce a textured substrate having at least one effective electrical property at a frequency of interest that is different from a bulk electrical property of each individual one of said dielectric board materials at said frequency of interest.

2. (Original) The method according to claim 1 further comprising the step of disposing an adhesive layer between said base plate and said dielectric pieces.

3. (Original) The method according to claim 2 further comprising the step of curing said adhesive layer.

4. (Original) The method according to claim 3 further comprising the step of polishing a surface of said textured substrate to obtain a selected substrate thickness.

5. (Original) The method according to claim 4 further comprising the step of disposing on said textured substrate at least one conductive trace to define an RF circuit element.

6. (Original) The method according to claim 1 further comprising the step of selecting said pattern and said plurality of dielectric board materials to produce said at least one effective electrical property.

{00010038;}

Appl. No. 10/694,468
Amendment dated: April 28, 2006
Response to Office Action dated: April 13, 2006

7. (Original) The method according to claim 1 further comprising the step of selecting said effective electrical property from the group consisting of permittivity, permeability, and loss tangent.
8. (Original) The method according to claim 1 further comprising the step of selecting a process for cutting each of said first and second dielectric board materials and arranging said dielectric pieces on said base plate to minimize any gaps between edges of adjacent ones of said dielectric pieces.
9. (Original) The method according to claim 1 further comprising the step of selecting at least one of said size and shape of said dielectric pieces based on an RF frequency of interest.
10. (Original) The method according to claim 1 further comprising the step of selecting said pattern based on an RF frequency of interest.
11. (Original) The method according to claim 1 further comprising the step of forming said dielectric board materials from a PTFE (PolyTetraFluoroEthylene) composite.
12. (Original) The method according to claim 11 further comprising the step of selecting said composite to include a material from the group consisting of glass fiber, woven glass and ceramics.
13. (Original) The method according to claim 1 further comprising the step of cutting said dielectric pieces to be electrically small relative to a wavelength of an RF frequency of interest.
14. – 24. (Cancelled)

{00010038;}